	Inches.
February, 1909:	
Cloverdale	5.38
Delta	6.89
Magalia	7.88
Mono Ranch	7.00
Santa Margarita	5.30
Sisson	7.83
Lytle Creek	5.16
March, 1909, Lytle Creek	5.52
November, 1909:	
Blue Canon	5.00
Cisco	5.05
Monumental	9.60
December, 1909:	
Rialto	6.70
Santa Margarita	7.70
Summerdale	7.62
January, 1910, Lytle Creek	5.50
January, 1911:	
Branscomb	6.85
Brush Creek	6.02
Camptonville	6.27
Los Gatos	6.15
Magalia	6.80
Nevada City	6.10
Nimshew	5.28
Santa Barbara	5.09
Squirrel Inn	5.85
Summerdale	6.43
Ben Lomond	7.15
Glenn Ranch	6.28
Glenn Ranch	6.14
Laurel	7.50
Laytonville	6.83
Lick Observatory	9.19
Lick Observatory	5.56
West Branch	5.19
March, 1911:	
Mono Ranch	7.90
San Luis Obispo	5.98
Sierra Madre	5.14
Stirling City	5.85

Mr. John Pettee states that on December 20–21, 1866, he measured the rainfall in San Francisco, as follows:

Time.	Date.	Inches.	Inches per hour.
11.30 a. m. to 4.45 p. m.	Dec. 20	1.97	0.37
4.45 p. m. to 7.45 p. m.	...do....	2.27	.76
7.45 p. m. to 9.50 p. m.	...do....	.85	.41
9.50 p. m. to 1.00 a. m.	Dec. 21	1.20	.39
1.00 a. m to 8.15 a. m.	...do....	1.47	.20
Total		7.76	.37

The reason for many measurements was that the gage held only about 2.50 inches.

MINIMUM TEMPERATURE ON MOUNT WHITNEY, CAL.

By A. G. McADIE.

Maximum and mimimum thermometers were placed in a small shelter on the north wall of the observatory on Mount Whitney, elevation 14,502 feet, in September, 1909. On May 24, 1910, Mr. G. F. Marsh, cooperative observer, succeeded in reaching the summit and found the instruments in the condition in which they were left. The minimum temperature was −23° F. and the maximum temperature 55° F.

In a Monthly Weather Review for May, 1910, the writer called attention to this reading as fairly representing the lowest temperature of that winter at the highest point in the United States proper. Lower temperatures were recorded in California during this same period. For example, −30° F. at Alturas on January 3, 1909, elevation 4,460 feet, and −29° F. at Tamarack, elevation 8,000 feet, January 5, 1909.

On September 26, 1912, the instruments were reset. Mr. F. H. Criss, who read the instruments, states that minimum thermometer No. 1270 indicated a temperature of −35° F. The maximum temperature was 65° F.

It may be stated that in the Sierra, just north of Lake Tahoe, temperatures as low as −30° F. (−34° C.) have occurred. During the winter of 1898 a minimum thermometer exposed on one of the high Sierra peaks recorded −17° F. During the same period the temperature at Bodie fell to −30° F.

The following low temperatures were reported during 1911:

	Elevation.	Temperature.	Date.
	Feet.	°F.	
Sierraville	5,000	−30	Feb. 16
Tamarack	8,000	−26	Dec. 30
Madeline	5,270	−24	Jan. 22
Truckee	5,819	−22	Feb. 26
Alturas	4,460	−21	Dec. 23

During 1912, Alturas, −26° F., January 3; Sierraville, −23° F., January 3.

BEAR VALLEY HYDROELECTRIC DEVELOPMENT, CALIFORNIA.

By JAMES H. WISE.[1]

The hydroelectric project on the south fork of the Yuba and Bear Rivers has been in contemplation for some time, but active work was not begun until permission was received from the railroad commission on July 3, 1912, by the Pacific Gas & Electric Co.

The development makes use for power purposes of the water already impounded in 20 reservoirs in the catchment area of the South Yuba, having a capacity of 2,024,000,000 cubic feet, combined with additional storage of 4,000,000,000 cubic feet, to be secured at Lake Spaulding. The water thus stored is to be diverted, together with the natural run-off, to the Bear River watershed, conducting it in tunnels and canals along the south side of the Bear River Canyon to a point about 3 miles northeast of Towle Station, on the Southern Pacific, to a regulating reservoir known as the "Drum Forebay." Two riveted steel pipe lines will lead from this reservoir to the power house, 1,350 feet lower in elevation, and situated on Bear River, where an installation of 40,000 kilowatts, consisting of 4 units, will be erected, together with the necessary transformers, exciters, governors, and other adequate equipment to make the entire installation complete. Electric power from this plant will be transmitted at 115,000 volts on a double circuit, steel-tower line, extending in a southwesterly direction via Nicolaus to Cordelia, the load center of the Pacific Gas & Electric Co. At this point stepdown transformers will be used for reducing the pressure to approximately 60,000 volts, permitting the power thus to be transmitted to various parts of the system: Oakland, Berkeley, Alameda, San Rafael, Santa Rosa, Vallejo, Petaluma, and northward toward Suisun, Cement, Woodland, Sacramento, Davis, Dixon, and, in fact, to any part of the vast territory already covered by the 60,000-volt network of transmission lines.

The project further includes the construction of a steel-tower line from Cordelia to San Rafael, Sausalito, and Lime Point, thus providing Pacific service to the Marin Peninsula and the transmission of hydroelectric power ultimately to San Francisco.

Adverting to Lake Spaulding, this splendid reservoir site, with a capacity of 4,000,000,000 cubic feet, or nearly double the combined capacity of all of the reservoirs in

[1] Assistant general manager Pacific Gas & Electric Co.